

Title (en)

Electro-hydraulic control system in a power transmission

Title (de)

Elektro-hydraulisches Steuerungssystem in einem Leistungsgetriebe

Title (fr)

Système de commande électro-hydraulique dans une transmission de puissance

Publication

EP 0768481 B1 20000202 (EN)

Application

EP 96202579 A 19960916

Priority

US 54257295 A 19951013

Abstract (en)

[origin: EP0768481A1] Power transmissions (16) incorporate gear ratios including a plurality of forward ratios, a neutral condition and at least one reverse ratio. The establishment of each ratio is controlled by selectively engageable hydraulically operated friction devices (C1-C5), such as clutches and brakes. The interchange between forward ratios is controlled by the interchange of at least one friction device. The control elements to accomplish the establishment and interchange of the ratios include a pressure source (50), shift valve (64,66,88), solenoid control valves (74,76,78) and pressure control valves (56,54). The solenoid valves are electrically actuated and the hydraulic portion of the control includes elements that permit continued operation of the transmission in selected ratios in the event of electrical discontinuance. Also provided within the hydraulic control is a pressure knockdown or pressure reducing valve element (120) which operates with one of the shift valves (64) to establish a maximum pressure level in the forward ratios that is less than the maximum pressure level in the reverse ratio. <IMAGE>

IPC 1-7

F16H 61/02

IPC 8 full level

F16H 61/00 (2006.01); **F16H 61/02** (2006.01); **F16H 61/686** (2006.01)

CPC (source: EP US)

F16H 61/0206 (2013.01 - EP US); **F16H 61/686** (2013.01 - EP US); **F16H 2200/201** (2013.01 - EP US)

Cited by

EP1152173A3; EP0980997A3; EP1061291A3

Designated contracting state (EPC)

DE FR GB IT

DOCDB simple family (publication)

EP 0768481 A1 19970416; **EP 0768481 B1 20000202**; DE 69606485 D1 20000309; DE 69606485 T2 20000615; JP 2925506 B2 19990728; JP H09126305 A 19970513; US 5616093 A 19970401

DOCDB simple family (application)

EP 96202579 A 19960916; DE 69606485 T 19960916; JP 27116296 A 19961014; US 54257295 A 19951013